



Loureiro Engineering Associates, Inc.

RECORDS CENTER
FACILITY MacDermid
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January 21, 2004

United States Environmental Protection Agency
New England Region
Office of Site Remediation and Restoration
1 Congress Street, Suite 1100 (HBT)
Boston, MA 02114-2023

Attn: Ms. Carolyn Casey

Re: Environmental Indicator Determination Report CA725
MacDermid Incorporated
526 Huntingdon Avenue, Waterbury, Connecticut

Dear Ms. Casey:

On behalf of MacDermid Incorporated, Loureiro Engineering Associates, Inc. (LEA) has prepared this letter and associated attachments to address your April 30, 2003 comment letter pertaining to the *Documentation of Environmental Indicator Determination (EID) Forms Current Human Exposures Under Control (CA725)* and *Migration of Contaminated Groundwater Under Control (CA750)* prepared by LEA and dated November 2002 for the MacDermid facility located at 526 Huntingdon Avenue (the Site). Specifically, this letter addresses the comments associated only with the *Current Human Exposures Under Control EID (CA725)*. LEA prepared the EID forms and this comment response letter in support of MacDermid's participation in the Voluntary Corrective Action Program (VCAP).

The United States Environmental Protection Agency's (EPA) comments are presented in *italics* below, followed by MacDermid's responses which have been prepared by LEA.

Specific Comments
Question 2

1. *Although it appears that MacDermid's CA 725 assessment is generally consistent with the RSRs, considering the current draft U.S. EPA guidance suggests that the presence of volatiles in groundwater or soil at approximately 30 bgs could potentially impact indoor air quality, resulting in a complete exposure pathway for on-site indoor air workers and off-site residents.*

The EPA Draft *Guidance for Evaluating the Vapor Intrusion to Indoor Air Pathway from*



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Groundwater and Soils, dated November 2002, was reviewed and a re-evaluation of volatilization of constituents was performed in order to address this comment. Based on that review, the volatilization of contaminants in soil and/or groundwater at depths of up to 30 feet below grade (fbg) was considered to have the potential to affect indoor air quality in buildings (i.e. residential and industrial/commercial) which consequently represents a complete exposure pathway for on-site {indoor} workers and off-site residents (dependent upon the direction of groundwater flow in the Site vicinity). With respect to the potential exposure risk to on-site indoor workers, operations at the facility have ceased and the Site buildings are currently unoccupied, hence there are no indoor workers at risk in Site buildings. Routine inspections at the facilities by MacDermid personnel are limited to short durations and as such, minimize the potential for exposure to potentially-impacted indoor air.

With respect to the potential exposure risk to off-site residents, LEA's position that groundwater flow direction beneath the Site and in the immediate Site vicinity is such that it does not flow in the direction of nearby residents but rather to the south, toward the Naugatuck River, eliminates the potential exposure risk for off-site residents. In the November 2002 EID form submittal, LEA calculated the groundwater flow direction to be to the south, parallel to the residential properties located to the west-southwest. During recent supplemental Site evaluation activities, additional groundwater monitoring wells were installed along the west-southwest property boundary (between the Site and the residential properties) and groundwater flow direction was refined to include data collected from the newly installed wells. This data confirms LEA's position that groundwater flow direction is to the south and not in the direction of the residential properties. This discussion is supplemented in the revised EID form and recently developed groundwater contours are depicted on Drawing 2, provided as an attachment to the EID.

2. *The impact of site operations and contaminated groundwater migration on surface water and sediments must be appropriately addressed and evaluated in the EI Determination. The impact and resolution of the 1994 release must be described and the current impact of contaminated groundwater on surface water and sediment in the Naugatuck River and Steele Brook must be discussed.*

The EID text has been revised to supplement the discussion of Site operations and contaminated groundwater migration on surface water and sediments. With the addition of two groundwater monitoring wells to the southwestern portion of the MacDermid Site, the direction of groundwater flow beneath the Site has been confirmed to be to the south, toward the Naugatuck River and does not appear to discharge to Steele Brook. Based on this data, with the exception of a 1994 release of copper etchant to the storm system which ultimately discharges to Steele Brook, it is LEA's position that potentially contaminated groundwater does not discharge to Steele Brook; therefore impact to sediment or surface water in this brook is precluded.

With respect to the 1994 release of copper etchant to Steele Brook via the storm system,



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sediment samples were collected from Steele Brook following the release and the results of the sampling indicated that concentrations of copper in sediment was generally highest at the point of discharge into Steele Brook, with declining concentrations detected in sediment further downstream. The concentrations of other metals evaluated as a result of the release, including nickel, lead and zinc, were either generally similar in background samples versus those collected at the point of discharge or the background sample concentration was greater than the concentration of the sample collected at the point of discharge. As a result of the release, approximately 30,000-gallons of water and copper etchant were removed from Steele Brook under the supervision of the Connecticut Department of Environmental Protection (DEP). Sediment samples were collected following source and impacted surface water removal activities. Although it appears that sediment may have been impacted at the point of discharge into Steele Brook, it should be noted that this surface water (at the point of the 1994 discharge) is practically inaccessible to recreators, as depicted on the photographs included as an attachment to the revised EID form.

As stated in the EID form, the Naugatuck River is located approximately 1,000-feet southeast of the Site and is the discharge point for groundwater flowing beneath the Site. A determination of that groundwater discharges to the Naugatuck River was completed by the November 2002 and September 2003 calculation of groundwater flow direction, evaluation of depth to groundwater, distance to the river, and approximate 40-foot decrease in topographic relief from the Site to the river. Based on this information, this is the surface water that possesses the greatest potential to be impacted by contaminated groundwater from historic Site operations. The Current Human Exposures Under Control EID, "...are for reasonably expected human exposures under current land- and groundwater-use conditions ONLY, and do not consider potential future land-or groundwater-use conditions or ecological receptors...". In the vicinity of the Site and area in which groundwater discharges, the Naugatuck River is located in a highly industrialized region with no public recreation areas and is practically inaccessible. Although the Naugatuck River in the Site area is classified as "C/B", its proximity to and impact from historic and current industrial properties precludes its use by recreators for leisure or for collection of fish for consumption. Accessibility to the river is restricted by the presence of numerous industrial and commercial properties along its reaches.

3. *Drawing 2 depicts Site features, groundwater sampling locations, and an interpretation of groundwater flow direction beneath the Site. Page 5, first paragraph, presents the statement that, 'Based on an evaluation of depth to groundwater and topographic relief change between the Site and the Naugatuck River, it is likely that groundwater beneath the Site discharges to the Naugatuck River.' MacDermid continues, (Page 5, fourth paragraph) 'From a review of groundwater analytical data collected in July and September 2002, combined with the fact that groundwater flow beneath the Site is southerly toward the Naugatuck River, it is concluded that the contaminated groundwater at the Site does not have to potential to impact abutting residential properties to the southwest.' Lack of groundwater*



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contours on the west side of the Site (Gear Street side), Drawing 2 does not provide support for this conclusion. Also, according to other statements made throughout the text, groundwater flowing beneath the Site discharges to both the Naugatuck River and Steele Brook. The potential for groundwater flow to the southwest toward the residential properties and Steele Brook should be evaluated with the installation of at least one additional groundwater monitoring well. Additional sampling for volatile organic compounds in groundwater to evaluate the potential for off-site indoor air impacts, and quarterly groundwater elevation measurements should be completed.

On September 18, 2003, nested shallow and deep monitoring wells MW-116S and MW-116D were installed on the western portion of the Site across from Huntingdon Place and the nearest residential properties. Well MW-116S was installed to a depth of 38 fbg and screened across the water table (i.e. 28 – 38 fbg) and MW-116D was installed to a depth of approximately 60 fbg at the bedrock surface. Following installation and well development, these wells were sampled and groundwater elevations were recorded on September 22, 2003. LEA calculated revised groundwater contours for the Site that included these newly installed wells. This contour map is included as Drawing 2, provided as an attachment to the EID. The groundwater contour map is generally consistent with historical calculations and confirms that groundwater beneath the Site flows to the south, parallel to Huntingdon Place, in the direction of the Naugatuck River. The residences on Huntingdon Place are cross- or up-gradient of the contamination plume originating at the Site and are therefore not considered an exposure risk. A more detailed discussion of the recent well installations, laboratory analysis associated with the September 2003 sampling round, and assessment of the potential impact to residential properties is provided in the revised EID report.

4. *Page 6 of the EI Determination states that soil sampling was conducted in areas where an exposure pathway exists (i.e. exposed soil, grass, and landscaped areas)-those areas likely to be encountered by Excavating Laborers, Groundskeepers, Environmental Samplers, and Trespassers. Facility drawings accompanying the EI Determination illustrate potential trespassing and groundskeeping exposure areas, however, no rationale has been provided in the text of the document to clarify why certain areas of exposure were evaluated in conjunction with specific receptors. For example, according to facility drawings, only two on-site areas have been depicted as potential trespasser exposure areas-the sludge disposal cap area located on the MacDermid North parcel on the northern side of Huntingdon Avenue and several discontinuous patches of property on the South Parcel adjacent to East Aurora Street. It is not clear why the sludge disposal cap area located on the North Parcel was the only area expected to be encountered by trespassers versus the entire North Parcel. Access to this area is not limited by controls such as fencing, gates, security personnel, etc. Provide documentation showing the exact extent of the property owned by MacDermid Inc. on the North Parcel. Discuss the area where drums were removed and provide data showing that there is no residual contamination from these drums. Revise the EI Determination to provide*

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rationale as to why exposure to specific receptors is limited to certain on-site areas of interest (i.e., what controls have been implemented to mitigate potential exposures at the facility for specific receptors), or alternatively, provide a citation to the appropriate reference where this information may be located in other facility documents.

A drawing of the details of the entire NORTH Parcel is included in the EID report as Drawing 4. The locations of former drums are shown on this drawing, as well as other features that were observed during the February 2002 Site inspection. It should be noted that recent survey data has confirmed that only two drums were present on the MacDermid NORTH parcel; other drums identified during Site inspections are located on adjacent properties.

The drums that were discovered during the February 2002 Site inspection were found without covers, crushed, and free of content. MacDermid personnel confirmed that these empty drums were not placed on the NORTH parcel from MacDermid activity, but rather were disposed by trespassers. Based on the condition and upland location of the drums, it is unlikely that the drums could have been disposed of intact and containing material. Based upon this conclusion, soil sampling beneath the drums was deemed unnecessary.

5. *Page 6 of the text presents the statement that the surface soil sample data set '...is adequate to assess the quality of surface soil in those areas likely to be encountered by Excavating Laborers, Groundskeepers, Environmental Samplers and Trespassers.' However, according to Drawing 3, which depicts the locations of historic and recent soil sampling locations, no recent surface soil samples have been collected and analyzed from the North Parcel, where a trespassing exposure scenario is likely to occur. Recent soil data includes four surface soil samples (SB-001 through SB-004) collected from the South Parcel only. Revise the EI Determination to provide justification regarding the adequacy of applying soil sampling data from surface soils collected from the South Parcel to assess the impact to potential surface soil exposure scenarios in the North parcel.*

The majority of the NORTH parcel has historically been vacant and undeveloped with the exception of a residence on the southernmost portion of the Site. MacDermid began using a 50 foot by 95 foot section of the North Parcel as the Former Staging Area in 1978. The remainder of the North Parcel has remained undeveloped and unused by MacDermid. Because the only potential source of exposure from surficial soil on the North Parcel has been capped since 1986, there is not a risk of exposure from this area.

The sample data set is adequate to assess the quality of surface soil in those areas likely to be encountered by Excavating Laborers, Groundskeepers, Environmental Samplers and Trespassers. Furthermore, that data set was collected from areas of the Site possessing the greatest potential to have been impacted by former Site manufacturing operations. No exceedances of the RDEC were noted. The EI Determination report has been revised to address the application of soil data



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from the South parcel as a general indicator of the condition of surficial soils on the entire Site.

6. *Page 6 of the text presents the statement that, "The only relevant potential exposures to the Naugatuck River and the Steele Brook from the Site are as a result of groundwater discharge to these water bodies as it is unlikely these water bodies would be used for recreational purposes." However, MacDermid has not provided any justification or compelling evidence to support this statement (i.e., a surface water classification which would render the Naugatuck River and Steele Brook unfit for recreational purposes). According to Section 2 (Page 2-1) of MacDermid's Conceptual Site Model (CSM) and Screening Levels (May 2002), Steele Brook has been assigned a classification of "B" and the Naugatuck River a classification of "C/B" by the Connecticut Department of Environmental Protection (DEP). According to the Connecticut Water Quality Standards, a class "B" water body includes such designated uses as recreational use, fish and wildlife habitats, agricultural and industrial supply and navigation. A "C/B" classification indicates that the surface water body has been impacted by point or nonpoint sources of pollution and currently does not meet criteria to support one or more designated uses of a class "B" water body, however, the water quality goal is achievement of Class B criteria and attainment of Class B designated uses. Section 3.2.3 of the CSM states that, "...recreators including sport fisherman and boaters could potentially be exposed to surface water and sediment in these rivers," and recreator exposure to Site contaminants via ingestion of fish is considered complete since chemicals that typically accumulate in fish tissue generally could be transported via groundwater. Further, although the EI Determination mentions the low probability that the Naugatuck River and Steele Brook will be used for recreational purposes in Question 2, Page 10 provides supporting rationale for Question 3 which states that "Direct contact with Site groundwater is possible to Off-site Recreators as it discharges into the River." Revise the EI Determination to eliminate any inconsistencies between the rationale presented to support the current human exposures under control determination, or alternatively revise the text to provide justification as to why recreational activity in the Naugatuck River and Steele Brook is reliably precluded.*

Additional investigations performed since the submission of the CSM have required a reassessment of some of the conclusions contained in that report. Based upon these investigations, it is now concluded that the Naugatuck River and Steele Brook are no longer considered exposure pathways to Recreators. The Naugatuck River is located approximately 1,000-feet to the southeast and is the discharge point for groundwater flowing beneath the Site. The discharge point was determined by calculation of groundwater flow direction, evaluation of depth to groundwater, distance to the river and approximate 40 foot decrease in topographic relief from the Site to the Naugatuck River. However, the section of the Naugatuck River that receives groundwater from beneath the Site is located in a highly industrialized region that has no public recreation areas and is geographically inaccessible to Recreators. Because these surface water bodies are inaccessible, the Surface Water exposure pathway is not considered



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complete. The EI Determination has been revised to provide greater detail regarding the potential use of Naugatuck River as a recreational water body.

Question 3

7. *It is unclear why food was excluded from the exposure pathway evaluation, as contaminated groundwater emanating from the Site could potentially impact surface water, sediments and consequently fish in nearby surface water bodies. According to MacDermid's Conceptual Site Model (CSM) and Screening Levels (May 2002), recreator exposure to Site contaminants via ingestion of fish should be considered since chemicals that typically bioaccumulate in fish tissue generally could be transported via groundwater. If the exposure pathway is not complete for any contaminated media-receptor combination, indicate such in the summary table and provide the rationale and references to support such a determination in the text of the document. Revise the EI Determination accordingly.*

The location of the Site within an industrialized urban area precludes agricultural uses on the Site or in the immediate vicinity of the Site. As such, there is no potential for exposure to food impacted by soil or groundwater.

The CSM report indicates that exposure to Site contaminants via ingestion of fish should be considered as a potential pathway because chemicals that bioaccumulate in fish could be transported by groundwater discharging from the Site. Further investigation at the Site and surrounding area since submission of that report have shown that, as with discussion of exposure to Recreators above, exposure via ingestion of fish is not considered a complete pathway because there are no accessible areas for recreational fishing downgradient of the Site on either Steele Brook or the Naugatuck River. The EI Determination has been revised to address the issue of exposure via food ingestion.

8. *Surface soil has been excluded from the list of potentially contaminated media in the Exposure Pathway Evaluation Table. Although in Question 2 MacDermid indicated that surface soil was not known or reasonably suspected to be contaminated above appropriate risk-based levels, surface soil should still be retained in the Exposure Pathway Evaluation Table, as the EI Form indicates. According to the instructions for completing the table under Question 3, specific media which are not found to be "contaminated" (per Question 2), should be struck-through on the table. Revise the Summary Exposure Pathway Evaluation Table as appropriate.*

The "Exposure Pathway Evaluation Table" (Question 3) has been revised to include surface soil.

9. *According to the Summary Exposure Pathway Evaluation Table, MacDermid has determined that a complete pathway exists for recreational receptors exposure to surface water and*



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sediment. However, in Question 2, only groundwater, subsurface soil, and ambient air were determined to be contaminated above appropriately protective risk-based levels. Therefore, as the responses and rationale presented in Question 2 determine the media which are considered during the exposure pathway analysis, many of MacDermid's responses as presented in the Summary Evaluation Table for Question 3 appear to be inconsistent with previous determinations. For example, residential exposure to groundwater, subsurface soil, and air (i.e., contaminated media as identified per Question 2) should be evaluated in Question 3. According to the EI Form template, residential exposure to subsurface soil may not be probable in most situations (see Note under Question 3), and therefore may not require a specific response in the table. However, MacDermid provides no response for the groundwater and ambient air residential exposure scenarios, which are probable exposure pathway combinations. Revise the EI Determination to eliminate any inconsistencies between Questions 2 and 3.

The EI Determination has been revised to indicate in Question 2 that it is unknown whether surface water and sediment downgradient of the Site at the discharge location of groundwater into the Naugatuck River are "contaminated." Following a release of copper etchant in 1994 into Steele Brook through catch basins located on the Site, 30,000-gallons of water and etchant were removed from the brook under guidance of the DEP. Eighteen sediment samples were subsequently collected at various locations from the Steele Brook and Naugatuck River. Data from these samples indicated that concentrations of copper were highest at the discharge location and decreased downstream of the release area. Sediments samples collected in the Naugatuck River upstream of the confluence with Steele Brook had higher concentrations of nickel and zinc than downstream of the confluence. No sediment or surface water samples were collected as part of this investigation to investigate the current condition of contamination either the Steele Brook or the Naugatuck River.

A discussion is presented in both Question 2 and Question 3 indicating that the urban setting and dense vegetation preclude access to the Naugatuck River and Steele Brook for recreation and for fishing. The EI Determination concludes in Question 3 that exposure to compounds that bioaccumulate in fish is not considered a complete pathway because of the inaccessibility to these water bodies.

10. Page 4 of the EI Determination outlines potential receptors and exposure scenarios associated with on-site and off-site activities. The bulleted list clearly distinguishes between on-site workers (e.g., excavating laborers, groundskeepers, indoor workers, environmental samplers) and off-site workers (e.g., utility repair workers). However the Summary Exposure Pathway Evaluation Table as outlined in Question 3, identifies potential human receptors in the industrial setting as "Workers" or "Construction". Therefore, it is unclear as to which category previously identified on-site and off-site workers are considered, as MacDermid has not provided a distinction between workers and construction workers in the evaluation of



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exposure pathway completeness. Revise the EI Determination to clarify this issue. Preferably, the Exposure Pathway Evaluation Table outlined in Question 3 should be revised to account for the potential receptors identified in the bulleted list in Question 2 (Page 4).

Page 4 of the EI Determination has been revised to indicate that “On-Site Workers” are identified as Excavating Laborers, Groundskeepers, Indoor Workers and Environmental Samplers, and “Off-Site Workers” are identified as Utility Repair Workers. A revised discussion, as appropriate, is also presented in the EID.

11. Page 9 of the EI Determination discusses workers’ exposure to contaminated ambient air (e.g., trench air) and groundwater. The text states that excavating laborers’ exposures to contaminants in groundwater, subsurface soil, and trench air will be controlled through the implementation of an institutional control, the Project Activity Analysis (PAA) process. However, as presented in the Summary Exposure Pathway Evaluation Table, a complete pathway exists for workers who are exposed to groundwater, subsurface soil, and ambient air and construction workers who are exposed to subsurface soil and ambient air. Therefore, if the PAA process controls worker exposure to contaminants in subsurface soil, ambient air, and groundwater, it is unclear why a complete exposure pathway determination was made for industrial receptors’ exposure to groundwater, subsurface soil, and ambient air. Revise the EI Determination to eliminate this apparent inconsistency between the rationale and determination summary.

The EID was developed to reflect that the potential for exposure exists; however, that potential is controlled through implementation of the Project Activity Analysis (PAA) process. The EID has been revised to reflect that a complete exposure pathway does not exist for workers, due to implementation of the PAA at the Site.

12. Page 12 (Question 4) of the EI Determination states that MacDermid compared on-site groundwater data to the Connecticut surface water protection criteria (SWPC) to address potential impacts to surface water based on discharge at the groundwater-surface water interface (GSI). In 2002, groundwater from four monitoring wells contained constituents that exceeded the SWPC. Therefore, MacDermid chose to calculate a site-specific dilution attenuation factor (DAF) in order to determine the potential impact of site groundwater discharge to the surface water and sediment of the Naugatuck River and Steele Brook, in accordance with the methodology provided in Section 22a-133k-3 (b)(3)(A) of the RSR. However, unless the flow dynamics within the aquifer (e.g., hydraulic conductivity, hydraulic gradient, cross-sectional discharge area) discharging to both the Naugatuck River and Steele Brook is exactly the same and unless the flow dynamics within the bodies of water themselves are the same, then the calculated DAF, as presented, should not be applied to both water bodies. Revise the text to provide justification how one site-specific DAF can be applied to two separate water bodies which appear to be drastically different (i.e., one has significantly



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less flow) or, alternatively, calculate two separate and unique DAFs to address the potential impact of groundwater discharge to both the Naugatuck River and Steele Brook.

On September 18, 2003, two additional, nested groundwater monitoring wells were installed along the southwest (Gear Street) portion of the Site. Groundwater contours generated using the newly installed monitoring well MW-116S. The groundwater contours drawn from groundwater elevations recorded on September 22, 2003 show that groundwater at the Site flows to the south toward the Naugatuck River, located approximately 1,000-feet to the south of the Site, and does not discharge into Steele Brook. Because contaminated groundwater from beneath the Site does not appear to discharge into the Steele Brook, the brook is not considered an exposure pathway.

Based upon additional investigation, it is now concluded that the Naugatuck River is no longer considered an exposure pathway because the river is located in a highly industrialized region that has no public recreation areas and is geographically inaccessible. Because the river has been deemed inaccessible to recreators and is not an exposure pathway, calculation of a revised DAF is no longer necessary. The EID has been revised to include a more detailed discussion of the accessibility to the Naugatuck River and Steele Brook.

*13. In accordance with the RSR, MacDermid calculated a site-specific DAF to evaluate the potential impact of contaminated groundwater emanating from the MacDermid facility to surface water and sediment in nearby surface water bodies. The calculated DAF $[(0.25 * 7Q_{10})/Q_{plume}]$, a value of 29.11, was multiplicatively applied to the SWPC (Appendix D to Sections 22a-133k-1 through 22a-133k-3 of the RSR), in effect computing an alternative surface water protection criteria. Following this approach, constituent concentrations detected in groundwater discharging from the Site into nearby surface water bodies was found to be well below the calculated alternative surface water protection criteria. MacDermid concluded that "Based upon these results, surface water and sediment in the Naugatuck River do not represent a significant exposure." However, it appears that MacDermid may have incorrectly applied the DAF to the SWPC in the RSR. The SWPC, established for the purposes of screening groundwater for the protection of surface water, already have an attenuation factor applied to account for the dilution of contaminants in groundwater prior to reaching the receiving surface water body. According to Section 22a-133k-3 (b)(3)(A) of the RSR, "An alternative surface-water protection criterion may be calculated for a substance listed in Appendix D of the most recent State of Connecticut Water Quality Standards by multiplying the lower of the human health or aquatic life criterion for such substance in said Appendix D..." by the DAF. Therefore, if this calculation is advanced and the MacDermid DAF, is correctly applied to the Connecticut Water Quality Standards numerical water quality criteria (as found in Appendix D of the Connecticut Water Quality Standards), the alternative surface water protection criteria for arsenic, for example, is established as a value of 1.83 µg/L (verses 116.44 µg/L as calculated by MacDermid). In addition, when evaluating carcinogens via this route of exposure an adjustment must be*



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made to the 7Q10 term, such that exposures over a 70 year human life span are considered. This adjustment considers the 70 -year mean harmonic flow of the water body and may be calculated by multiplying the 7Q10 term by a factor of three. Also, when choosing the lower of the human health or ecological criterion from the State of Connecticut Water Quality Standards (Appendix D), a facility is not required to consider the "water and organisms" criteria under the human health setting for evaluation of a Class B (or lower) surface water body. In this instance, the sole human health criteria which must be considered is the "organisms only" criteria. Revise the EI Determination to appropriately apply the site-specific DAF to calculate alternative surface water protection criteria, or alternatively, apply the default or generic CTDEP SWPC in Appendix D of the RSR as a groundwater screening tool in determining whether potential impacts to surface water and sediment will result in significant exposures.

As discussed in response to Comment 12 above, it has been determined that the Naugatuck River is not considered an exposure pathway and therefore, calculation of a DAF is no longer necessary. The EID has been updated to reflect this information.

We trust this information addresses your comments. If you have any questions regarding this project, please do not hesitate to contact Brian Cutler or me at (860) 747-6181.

Sincerely,

LOUREIRO ENGINEERING ASSOCIATES, INC.

Kimberly M. Clarke
Project Manager

Attachment

Cc: Mr. Troy Charlton, MacDermid Incorporated
Mr. Richard Nave, MacDermid Incorporated